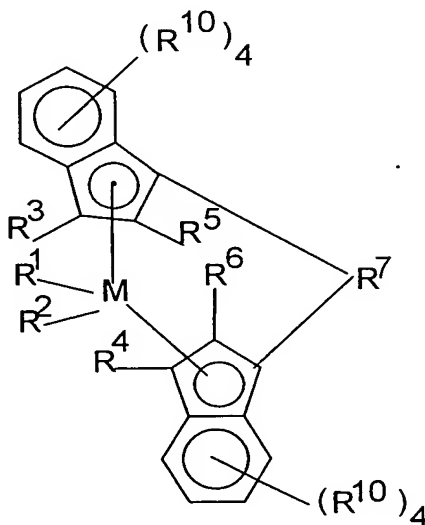


Claim 1. A compound represented by the formula:

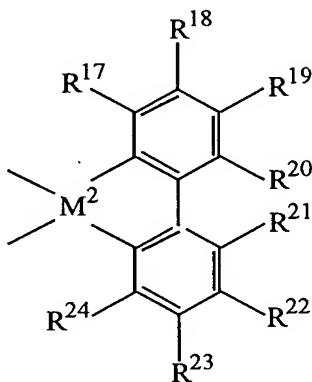


R¹ and R² are identical or different, and are one of a hydrogen atom, a C₁-C₁₀ alkyl group, a C₁-C₁₀ alkoxy group, a C₆-C₁₀ aryl group, a C₆-C₁₀ aryloxy group, a C₂-C₁₀ alkenyl group, a C₂-C₄ alkenyl group, a C₇-C₄₀ arylalkyl group, a C₇-C₄₀ alkylaryl group, a C₈-C₄₀ arylalkenyl group, or a halogen atom; ~~or R¹ and R² are a conjugated diene which is optionally substituted with one or more hydrocarbyl, tri(hydrocarbyl)silyl groups or hydrocarbyl, tri(hydrocarbyl)silylhydrocarbyl groups, said diene having up to 30 atoms not counting hydrogen;~~

R⁵ and R⁶ are identical or different, and are one of a hydrogen atom, a halogen atom, a C₁-C₁₀ alkyl group which may be halogenated, a C₆-C₁₀ aryl group which may be halogenated, a C₂-C₁₀ alkenyl group, a C₇-C₄₀ arylalkyl group, a C₇-C₄₀ alkylaryl group, a C₈-C₄₀ arylalkenyl group, a -NR₂¹⁵, -SR¹⁵, or

3 $\sim\text{OR}^{15}$, $\sim\text{OSiR}_3^{15}$ or $\sim\text{PR}_2^{15}$ radical, wherein R^{15} is one of a halogen atom, a C_1 - C_{10} alkyl group, or a C_6 - C_{10} aryl group;

R^7 is



10 wherein: R^{17} to R^{24} are as defined for R^1 and R^2 , or two or more adjacent radicals R^{17} to R^{24} , including R^{20} and R^{21} , together with the atoms connecting them form one or more rings;

M^2 is carbon, silicon, germanium or tin; and

the radicals R^3 , R^4 and R^{10} are identical or different and have the meanings stated for R^5 and R^6 , or two adjacent R^{10} radicals are joined together to form a ring.

15 Claim 2. The compound of claim 1 wherein M^2 is silicon.

Claim 3. The compound of claim 1 wherein M is zirconium, titanium or hafnium.

20 Claim 4. The compound of claim 1 wherein M is zirconium.

Claim 5. The compound of claim 1 wherein R^5 and R^6 are not hydrogen.

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Claim 6. The compound of claim 1 wherein R¹²-R²⁴ are hydrogen.

Claim 7. A catalyst composition comprising the reaction product of the compound of claim 1 and a cocatalyst.

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Claim 8. The catalyst composition of claim 7 wherein the cocatalyst comprises one or more non-coordinating anion activators.

Claim 9. The catalyst composition of claim 7 wherein the cocatalyst comprises one or more alkylalumoxane activators.

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Claim 10. The catalyst composition of claim 7 wherein the cocatalyst comprises a non-coordinating anion activator and an alkylalumoxane activator.

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